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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS : Dr. Ralf KÜHN, et al

SERIAL NO. : TO BE ASSIGNED

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ART UNIT : TO BE ASSIGNED

EXAMINER : TO BE ASSIGNED

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November 12, 2001

Hon. Commissioner of Patents  
Washington, D.C. 20231

**PRELIMINARY AMENDMENT**

SIR:

Prior to examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

Insert as the first paragraph the following new paragraph: -- This application claims priority pursuant to 35 U.S.C. § 120 of U.S. Provisional Application No. 60/252,191 filed on November 21, 2000; and U.S. Provisional Application No. 60/311,876 filed on August 13, 2001. This application also claims priority pursuant to 35 U.S.C. § 119 of European Patent Application No. 0012462.7 filed on November 10, 2000; and European Patent Application No. 001109543 filed on April 17, 2001. --

IN THE CLAIMS:

Amend claims 9, 25, 26 and 34 to read as follows:

9. The fusion protein according to claim 1, wherein the signal peptide domain is derived from a protein selected from the group consisting of yeast GAL4, yeast SKI3, yeast L29, yeast histone H2B, polyoma virus large T protein, VP1 capsid protein, VP2 capsid protein, SV40 VP1 capsid protein, VP2 capsid protein, adenovirus E1a, adenovirus DBP, influenza virus NS1, hepatitis virus core antigen, mammalian lamin, mammalian c-myc, mammalian max, mammalian c-myb, mammalian p53, mammalian c-erbA, mammalian jun, mammalian Tax, mammalian steroid receptor, mammalian Mx, and SV40 T-antigen.

25. A microorganism containing the DNA of claim 21 or containing a vector containing said DNA.

26. A process for preparing a fusion protein comprising:

- (a) a recombinase domain comprising a recombinase protein or a mutant thereof having a recombinase activity similar to that of the corresponding wild-type recombinase; and
- (b) a signal peptide domain linked to said recombinase domain which directs nuclear import of said fusion protein in eucaryotic cells;

said process comprising culturing a microorganism as defined in claim 25 under conditions suitable for expression of said fusion protein and recovering said fusion protein.

34. A method for recombining DNA molecules of cells or organisms containing recombinase recognition sequences for a recombinase protein of the recombinase domain of the fusion protein comprising:

- (a) a recombinase domain comprising a recombinase protein or a mutant thereof having a recombinase activity similar to that of the corresponding wild-type recombinase; and
- (b) a signal peptide domain linked to said recombinase domain which directs nuclear import of said fusion protein in eucaryotic cells;

said method comprising supplying the cells or organisms with said fusion protein or with a DNA sequence of claim 21 or a vector containing said DNA sequence which DNA sequence or vector are capable of expressing said fusion protein in the cell or organism.

REMARKS

Amendments have been made to claims 9, 25, 26 and 3<sup>5</sup> to remove multiple dependencies to reduce costs. A clean copy of these claims is presented above. A mark-up showing the changes that have been made to these claims using brackets and underlining is attached.

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For the record, Applicants emphasize that although the claims were amended, and, therefore, might be argued to have been amended for a reason substantially related to patentability, a fair reading of the amended claims will reveal that the departures from the previous claims were for clarification purposes only, and that Applicants did not narrow the claims in any material respect. Therefore, Applicants submit that the amended claims are entitled to the full range of equivalents.

Early and favorable action is earnestly solicited.

Respectfully submitted,

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**MARK-UP SHOWING THE CHANGES MADE IN THE PREVIOUS CLAIMS TO  
YIELD THE CLAIMS AS AMENDED ABOVE**

9. The fusion protein according to claim 1 [or 5], wherein the signal peptide domain is derived from a protein selected from the group consisting of yeast GAL4, yeast SKI3, yeast L29, yeast histone H2B, polyoma virus large T protein, VP1 capsid protein, VP2 capsid protein, SV40 VP1 capsid protein, VP2 capsid protein, adenovirus E1a, adenovirus DBP, influenza virus NS1, hepatitis virus core antigen, mammalian lamin, mammalian c-myc, mammalian max, mammalian c-myb, mammalian p53, mammalian c-erbA, mammalian jun, mammalian Tax, mammalian steroid receptor, mammalian Mx, and SV40 T-antigen.

25. A microorganism containing the DNA of claim 21 or [the] containing a vector [of claim 24] containing said DNA.

26. A process for preparing a fusion protein [as defined in claim 1 which comprises] comprising:

(a) a recombinase domain comprising a recombinase protein or a mutant thereof having a recombinase activity similar to that of the corresponding wild-type recombinase; and

(b) a signal peptide domain linked to said recombinase domain which directs nuclear

**import of said fusion protein in eucaryotic cells;**

**said process comprising** culturing a microorganism as defined in claim 25 under conditions suitable for expression of said fusion protein and recovering said fusion protein.

34. A method for recombining DNA molecules of cells or organisms containing recombinase recognition sequences for a recombinase protein of the recombinase domain of the fusion protein [as defined in claim 1, which method comprises] **comprising:**

- (a) **a recombinase domain comprising a recombinase protein or a mutant thereof having a recombinase activity similar to that of the corresponding wild-type recombinase; and**
- (b) **a signal peptide domain linked to said recombinase domain which directs nuclear import of said fusion protein in eucaryotic cells;**

**said method comprising** supplying the cells or organisms with [a] **said** fusion protein [as defined in claim 1] or with a DNA sequence of claim 21 or a vector [of claim 24] **containing** **said DNA sequence** which **DNA sequence or vector** are capable of expressing said fusion protein in the cell or organism.